



Impaction of feces in a loop of sigmoid colon: A rare cause of incarceration of inguinal hernia in children

Akhilesh Kumar Roy*, Janardhan P. Ghildiyal

Division of Pediatric Surgery, Department of Surgery, Era's Lucknow Medical College, Sarfaraj Ganj, Hardoi Road, Lucknow, Uttar Pradesh 226003, India

Available online 5 October 2006

KEYWORDS

Incarceration;
Inguinal hernia;
Sigmoid colon

Abstract Incarceration of inguinal hernia in children is not a very rare occurrence. The incidence of incarceration of hernia is about 12–17% in children below 10 years of age and two-thirds of incarcerations occur during the first year of life. Sigmoid colon as a content of childhood hernia is a very rare occurrence. We report a case of child with incarceration of inguinal hernia caused by impaction of feces in a loop of sigmoid colon. To the best of my knowledge this will be the first case report of such a finding in children.

© 2006 Surgical Associates Ltd. Published by Elsevier Ltd. All rights reserved.

Case report

A male child came on his first birthday with history of excessive crying, bilious vomiting and swelling of scrotum. There was history of scrotal swelling since birth but for last 1 month swelling never disappeared completely. On examination child was dehydrated and irritable.

Scrotum was full but not tense, on palpation of scrotum it was an irreducible kneadable swelling (Fig. 1a). After hydration, patient was taken up for surgery. On exploration of inguinal canal there was only small amount of serous fluid in the hernial sac, a loop of sigmoid colon loaded with feces was present as the content of sac (Fig. 1b). Colon was viable; no evidence of any ischemia of the bowel was present. With gentle manipulation it was possible to negotiate the colon back into the abdominal cavity without the need of extending the neck of hernia sac. Heniotomy

along with ligation and transfixation of hernial sac completed. Post-operative course was uneventful.

Discussion

The incidence of incarceration of hernia is about 12–17% in children below 10 years of age.^{1,2} Two-thirds of incarcerations occur during the first year of life, with reported incidences of 28–31% for infants under the age of 2–3 months^{1,3} and 24% for infants aged less than 6 months.

There have been a varied number of contents in the inguinal hernia sac. Sigmoid colon as a content of hernia sac is not a very common occurrence. There are various case reports about sigmoid colon in hernial sac and its associated complications. Perforation of a solitary diverticulum of sigmoid colon in an incarcerated scrotal hernia⁴ perforated carcinoma of the sigmoid colon in an incarcerated inguinal hernia,⁵ strangulated inguinal hernia with sigmoid perforation by a foreign body⁶ have been reported earlier. This is a rare cause of incarceration of inguinal hernia in children.

* Corresponding author. Tel.: +91 9336920353.

E-mail address: royaksroy@yahoo.co.in (A.K. Roy).

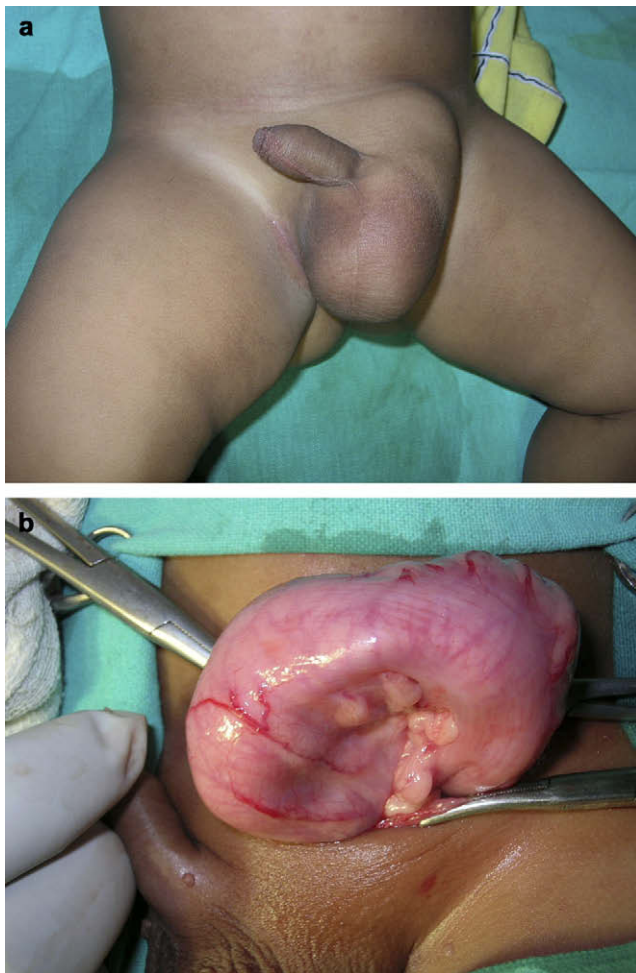


Figure 1 (a) Incarcerated inguinal hernia. (b) Sigmoid colon loaded with feces.

References

1. Rowe MI, Clatworthy HW. Incarcerated and strangulated hernias in children. *Arch Surg* 1970;**101**:136.
2. Stephens BJ, Rice WT, Koucky CJ, Gruenberg JC. Optimal timing of elective indirect inguinal hernia repair in healthy children: clinical considerations for improved outcome. *World J Surg* 1992 Sep–Oct;**16**(5):952–6 [discussion 957].
3. Rescorla FJ, Grosfeld JL. Inguinal hernia repair in the perinatal period and early infancy: clinical considerations. *J Paediat Surg* 1984;**19**:832.
4. Kouraklis G, Glinavou A, Andromanakis N, Karatzas G. Perforation of a solitary diverticulum of sigmoid colon in an incarcerated scrotal hernia. *Dig Dis Sci* 2004 May;**49**(5):883–4.
5. Kouraklis G, Kouskos E, Glinavou A, Raftopoulos J, Karatzas G. Perforated carcinoma of the sigmoid colon in an incarcerated inguinal hernia: report of a case. *Surg Today* 2003;**33**(9):707–8.
6. Badowski A, Symonowicz P, Zaremba Z, Zaras T. Strangulated inguinal hernia with sigmoid perforation by a foreign body and scrotal phlegmon. *Wiad Lek* 1980 Apr 1;**33**(7):575–7.